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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/594,216 | 06/14/2000 | Randall Wayne Frei | COM21-P002 | 7839 |
| 7590 07/12/2005 | | | EXAMINER | |
| Gaines P. Carter, Esq. Arris International Inc. 11450 Technology Circle Duluth, GA 30097-1504 | | | TRAN, PHUC H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2666 | |

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/594,216

Applicant(s)

FREI, RANDALL WAYNE

Examiner

PHUC H. TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-29 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, 12-19, and 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thubert et al. (U.S. Patent No. 6603769 B1) in view of Saito et al. (U.S. Patent No. 5732071).

- With respect to claims 1, 12-13, & 21-22, Thubert teaches a system and method for improving traffic operation in an internet environment, which is interpreted as enabling layer-3 communication within a sub-network for those members of the sub-network without layer-2 communication, the system comprising:

a sending device, a receiving device (source and target in Fig. 2), a forwarding agent (routers in Fig. 2), a first network device (networks in Fig. 1) comprising a media access control address of a forwarding agent, the first network device interprets an address resolution protocol request from the sending device (col. 9, lines 24-27). Thubert fails to teach sending an address resolution protocol reply comprising the media access control address of the forwarding agent to the sending device. Saito teaches in response to ARP request and response frame containing MAC address of bridge device. The method of responding ARP request of Saito can be implemented by adding MAC address of the forwarding agent at the router (in Fig. 6) for fast processing and transmitting. Therefore, it would have been obvious to a person of ordinary skill

in the art at the time of the invention was made to implement the responding method by adding the MAC address of the forward agent into responding frame for reducing transmission time and fast processing time.

- With respect to claims 2-3, 16, & 25, Thubert discloses wherein the first network device comprises a proxy-proxy address resolution protocol function adapted to interpret the address resolution protocol request (col. 5, line 33; col. 7, lines 40-41).

- With respect to claim 4, Thubert teaches wherein the receiving device comprises a network device comprising an Internet protocol address and a media access control address (see abstract).

- With respect to claims 5, 15, & 24, Thubert discloses wherein the receiving device comprises a computer (e.g. source device).

- With respect to claims 6, 8, 14, 18, 23 & 27, Thubert teaches wherein the first network device comprises a network device adapted to communicate through a plurality of network communication layers including layer-3 (col. 2, lines 1-22).

- With respect to claims 7, 17, & 26, Thubert discloses wherein the first network device comprises a switch (col. 1, line 12).

- With respect to claims 9, 19, & 28, Thubert discloses wherein the forwarding agent comprises a router (routers in Fig. 1).

3. Claims 10, 20, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thubert et al. (U.S. Patent No. 6603769 B1) and Saito et al. (U.S. Patent No. 5732071) in further view of Short et al. (U.S. Patent No. 6130892).

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- With respect to claims 10, 20, & 29, Thubert and Saito discloses all the aspect of the claimed invention as set forth above but fails to teach wherein the forwarding agent comprises a firewall. Short teaches firewall (Fig. 7E) for protection. The firewall can be utilized at the router of Thubert for protection the network. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to utilized the firewall for filter packet and protection network.

Response to Arguments

4. Applicant's arguments with respect to claims 1-10, and 12-29 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

5. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Saito et al. (U.S. Patent No. 5732071) discloses ATM bridge device and ATM bridging scheme for realizing efficient ATM bridge interconnection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-7471. The examiner can normally be reached on M-F (8-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
7/9/05



DANG TON
PRIMARY EXAMINER